ABSTRACT OF THE DISCLOSURE

Systems and techniques to interpret signals on a channel. In general, in one implementation, the technique includes: obtaining an output signal sequence from a partial response channel, determining an input sequence of the partial response channel by maximizing a correlation metric of an estimated output sequence with the obtained output sequence, the estimated output sequence being estimated based on the partial response channel, and providing an output corresponding to the determined input sequence. An apparatus can include a branch metric generator that generates branch metrics comprising a correlation of obtained output sequences and estimated output sequences for a partial response channel. The apparatus can further include an add-compare-select component that compares paths and determines survivor paths using generated branch metrics, a memory that retains metrics information, and a trace-back component that determines a best path of the survivor paths and outputs sequence information based on the determined best path.

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